LINK ELECTRONICS, INC.

ANALOG PULSE GENERATOR
812-OP/K

MADE IN THE USA

OUTPUTS
- **Subcarrier**
- **H Drive**
- **V Drive**

For Future Generations

The 812 OP/K is designed to provide H Drive, V Drive and color subcarrier for system applications which require 4Vpp drive pulses and 2Vpp subcarrier. Each of the output pulses is rise-time controlled to EIA standards and will drive a 75 Ohm load at its specified voltage. The subcarrier output is filtered for low harmonic distortion and is driven by a discrete amplifier. The 812 OP/K will reside in the SPG-812 chassis alongside various analog and digital modules-up to six modules per chassis.

When gen-locking to incoming video, the SPG-812 chassis will have either an analog 812 OP/C, gen-lock to analog black or a 812 OP/D digital genlock module in slot #2. This module places the timing pulses down the motherboard buss as reference.

The 812 OP/K pulse generator module then uses these pulses to lock the PLL on the module and reset the vertical and horizontal counters within the complex programmable logic devices. This times up all counters by an external reference.

When the 812 OP/A analog black burst module, master timebase, is running in its free-run mode a front panel control adjusts the frequency of the Voltage Controlled Crystal Oscillator (VCXO). This device features a stability of 2.5ppm over the operating temperature range of 0° to 70° C.

The rear panel view of the SPG-812 is shown on the back page, showing two 812 OP/H installed in the cell # 5 and # 6 (as viewed from the rear). An 812 OP/K is installed in cell # 3. Cell #1 is dedicated for tone, analog and AES. Cell # 2 is dedicated for gen-lock or the master time base, 812 OP/A, B, C or D. A mixture of analog or digital in the same frame depends on the specific module chosen. The rear panel accommodates a connector for remote control of the test pattern generator. Two test pattern generators may reside in the same frame, one local and one remote.

Power supply voltage fault indication is accomplished by a circuit that monitors all three supply voltages and turns off the green LED if one or any is lower then a nominal value.

The PCO-818 automatic pulse change-over modules operate as independent or synchronized operation. Two PCO-818 change-over chassis may be interlinked to cause all modules to switch should a failure occur in the master generator.

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812-OP/K PULSE GENERATOR

SPECIFICATIONS

PULSE OUTPUTS:
One Each as Follows:

H Drive: 4.0Vpp
V Drive: 4.0Vpp
Width: . . . . . Meets EIA RS-170A
Connector: . . . . . 75 Ohm BNC
Impedance: . . . . . 75 Ohm ±1%
Coupling: . . . . . DC
Tilt & Overshoot: . . . . . <0.5%
Jitter: . . . . . <1ns
Rise Time: . . . . . 140ns ±20ns
Amplitude Stability: . . . . . ±1%

COLOR SUBCARRIER OUTPUT:

Level: 2.0Vpp
Connector: . . . . . 75 Ohm BNC
Impedance: . . . . . 75 Ohm ±1 %
Coupling: . . . . . AC
Frequency: 3.579545MHz
Jitter: . . . . . 0.5°
Amplitude Stability: . . . . . ±10%
Harmonic Distortion: . . . . . -45dB

PHASING CONTROLS:

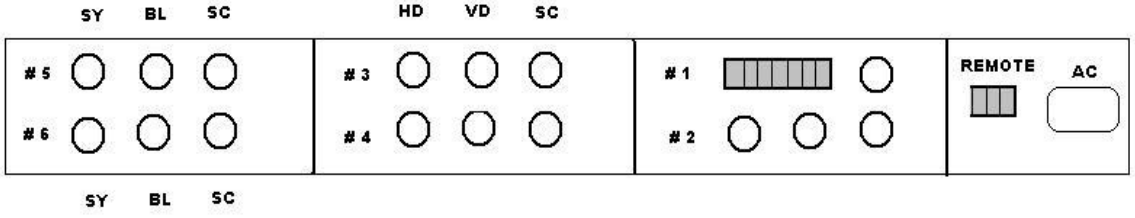
Horizontal Phasing: . . . . . Infinite Window
Resolution: . . . . . 37ns Increments
Vertical Phasing: . . . . . Infinite Window
Resolution: . . . . . 1 line or 63.5 us Increments
Sub-carrier Phasing: . . . . . Infinite Window (360°)
Resolution: . . . . . 0.5° Increments

REFERENCE INPUTS:

Signal Type: . . . . . Horizontal Blanking .Vertical Blanking, Field Identification, CFI

ENVIRONMENTAL:

Temperature: . . . . . 0 to 50 C ambient
Humidity: . . . . . 10% to 90% non-condensing



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